

CPC**COOPERATIVE PATENT CLASSIFICATION****E04H****BUILDINGS OR LIKE STRUCTURES FOR PARTICULAR PURPOSES; SWIMMING OR SPLASH BATHS OR POOLS; MASTS; FENCING; TENTS OR CANOPIES, IN GENERAL** ([foundations E02D](#))**NOTE**

This subclass deals primarily with the layout of buildings as a whole, but includes details which are peculiar to types of buildings or buildings for special purposes, specified in the groups. The word "buildings" does not exclude engineering structures and other constructions

This subclass provides for canopies in general and for canopies similar in construction to tents. For canopies having special application, see the relevant class, e.g. bed canopies [A47C 29/00](#); protecting chairs against the weather [A47C 7/66](#); sunshades or awnings for buildings [E04F 10/00](#)

In this subclass, the term "tent" means a tent or canopy having a supporting means, e.g. frame and a flexible cover

WARNING

The following IPC groups are not used in the CPC scheme. Subject matter covered by these groups is classified in the following CPC groups:

[E04H 4/02](#) covered by [E04H 4/00C](#), [E04H 4/00D](#)
[E04H 4/04](#) covered by [E04H 4/00C](#), [E04H 4/00D](#)

E04H 1/00

Buildings or groups of buildings for dwelling or office purposes; General lay-out, e.g. modular co-ordination, staggered storeys {small buildings}([E04H 3/00](#) takes precedence; buildings for two or more purposes, e.g. drive-in buildings [14/00](#); building construction in general [E04B 1/00](#))

E04H 1/005

. {Modulation co-ordination}

E04H 1/02

. Dwelling houses; Buildings for temporary habitation, {e.g. summer houses}(small erections for limited occupation [E04H 1/12](#)){collapsible, erectable or rotatable buildings [E04B 1/343](#)}

E04H 1/04

.. Apartment houses arranged in two or more levels

E04H 1/06

. Office buildings; Banks ([E04H 1/12](#) takes precedence; furniture or fittings for shops, storehouses or the like [A47F](#))

E04H 1/12

. Small buildings or other erections for limited occupation, erected in the open air or arranged in buildings, e.g. kiosks, waiting shelters for bus stops or for filling stations, roofs for railway platforms, watchmen's huts, dressing cubicles (movable screens as household equipment [A47G 5/00](#))

E04H 1/1205

.. {Small buildings erected in the open air ([E04H 1/1272](#) takes precedence)}

E04H 1/1211

... {Waiting shelters for bus stops}

- E04H 1/1216 . . . {Public W.C.s}
 - E04H 1/1222 . . . {Sales kiosks}
 - E04H 1/1227 . . . {Traffic control kiosks}
 - E04H 1/1233 . . . {Shelters for filling stations}
 - E04H 1/1238 . . . {Shelters for engines, e.g. electrical meter housings}
 - E04H 1/1244 . . . {Dressing or beach cabins}
 - E04H 1/125 . . . {Small buildings, arranged in other buildings ([E04H 1/1272](#) takes precedence)}
 - E04H 1/1255 . . . {Voting booths}
 - E04H 1/1261 . . . {Cubicles for fire-protection}
 - E04H 1/1266 . . . {Cubicles for dressing; Toilets}
 - E04H 1/1272 . . . {Exhibition stands}
 - E04H 1/1277 . . . {Shelters for decontamination}
 - E04H 1/14 . . . Telephone cabinets
- E04H 3/00** **Buildings or groups of buildings for public or similar purposes; Institutions, e.g. infirmaries, prisons** (portions of buildings for individual occupation, e.g. cubicles [E04H 1/00](#); structures covering a large free area [E04B 1/342](#))
- E04H 3/02 . . . Hotels; Motels; Coffee houses; Restaurants; Shops; Department stores {furnishing or fitting [A47F](#)}
 - E04H 3/04 . . . Restaurants or shops having arrangements for self-service (paying counters [A47F 9/02](#); furniture or installations specially adapted for supermarkets [A47F 10/00](#); transport aspects [B65G](#); coin-freed apparatus [G07F](#))
 - E04H 3/06 . . . Museums; Library buildings
 - E04H 3/08 . . . Hospitals, infirmaries, or the like; Schools; Prisons
 - E04H 3/10 . . . for meetings, entertainments, or sports
 - E04H 3/12 . . . Tribunes, grandstands or terraces for spectators {or amphitheatres}(auditoriums [E04H 3/30](#); chairs, stools, benches [A47C](#))
 - E04H 3/123 . . . {Telescopic grandstands}
 - E04H 3/126 . . . {Foldable, retractable or tiltable tribunes ([E04H 3/123](#) takes precedence)}
 - E04H 3/14 . . . Gymnasiums; Other sporting buildings (tribunes [E04H 3/12](#))
 - E04H 3/16 . . . for swimming (swimming or splash baths or pools [E04H 4/00](#))
 - E04H 3/165 {having movable parts}
 - E04H 3/22 . . . Theatres; Concert halls; Studios for broadcasting, cinematography, television or similar purposes (drive-in buildings [E04H 14/00](#); equipment for theatres or concert halls [A63J](#); {vehicles specially adapted to carry a theatre or stage [B60P 3/025](#)})
 - E04H 3/24 . . . Constructional features of stages
 - E04H 3/26 Revolving stages; Stages able to be lowered (devices for raising or lowering persons [A63J 5/12](#))
 - E04H 3/28 Shiftable or portable platforms
 - E04H 3/30 . . . Constructional features of auditoriums (chairs, stools, benches [A47C](#); building details providing acoustical effects [E04B 1/99](#))

- E04H 4/00** **Swimming or splash baths or pools** (wave-producers for baths [A47K 3/10](#); separation [B01D](#); treatment of water [C02F](#); wave-producing pumps [F04D 35/00](#))
- E04H 4/0006 . {Devices for producing waves in swimming pools (generating current of water in swimming pools [A63B 69/125](#))}
 - E04H 4/0012 . {Floating swimming pools}
 - E04H 4/0018 . { Easily movable or transportable swimming pools}
 - E04H 4/0025 .. {with inflatable parts}
 - E04H 4/0031 .. { with shell type elements}
 - E04H 4/0037 ... { Mono-shell type}
 - E04H 4/0043 .. { mainly made of panels ([E04H 4/0031](#) takes precedence)}
 - E04H 4/005 ... { characterised by the framework for supporting the panels}
 - E04H 4/0056 .. { with a framework combined with a water retaining bag}
 - E04H 4/0062 .. { characterised by stacked planks or staves}
 - E04H 4/0075 . {made of concrete ([E04H 4/0012](#) takes precedence)}
 - E04H 4/0081 .. {with walls and floor cast in situ}
 - E04H 4/0087 .. {with walls prefabricated and floor cast in situ}
 - E04H 4/0093 .. {with walls and floor prefabricated}
 - E04H 4/06 . Safety devices; Coverings for baths
 - E04H 4/065 .. {Floors adjustable in height}
 - E04H 4/08 .. Coverings consisting of rigid elements, {e.g. coverings composed of separate or connected elements}
 - E04H 4/082 ... {composed of flexibly or hingedly-connected slat-like elements, which may or may not be wound-up on a fixed axis ([E04H 4/088](#) takes precedence)}
 - E04H 4/084 ... {with lifting mechanism}
 - E04H 4/086 ... {Sliding covers ([E04H 4/084](#) and [E04H 4/088](#) take precedence)}
 - E04H 4/088 ... {Covers made in concertina folds}
 - E04H 4/10 .. Coverings of flexible material
 - E04H 4/101 ... {wound-up on a fixed axis}
 - E04H 4/103 ... {with inflatable chambers}
 - E04H 4/105 ... {supported by air pressure under the cover}
 - E04H 4/106 ... {supported by separate buoyant bodies}
 - E04H 4/108 ... {supported by frames}
 - E04H 4/12 . Devices or arrangements for circulating water, {i.e. devices for removal of polluted water, cleaning baths or for water treatment}
 - E04H 4/1209 .. {Treatment of water for swimming pools (filters [B01D](#))}
 - E04H 4/1218 ... {Devices for removal of polluted water; Circumferential gutters}
 - E04H 4/1227 { Circumferential gutters}
 - E04H 4/1236 ... { Bottom drains}

- E04H 4/1245 . . . {Recirculating pumps for swimming pool water}
- E04H 4/1254 . . . { Arm-mounted debris traps or flow diverters}
- E04H 4/1263 . . . {Floating skimmers}
- E04H 4/1272 . . . { Skimmers integrated in the pool wall}
- E04H 4/1281 . . {Devices for distributing chemical products in the water of swimming pools}
- E04H 4/129 . . {Systems for heating the water content of swimming pools (solar collectors using pools [F24J 2/04B16](#), [F24J 2/0461](#); by solar radiation [F24J 2/423](#))}

- E04H 4/14 . . Parts, details or accessories not otherwise provided for
- E04H 4/141 . . {Coping elements for swimming pools}
- E04H 4/142 . . . {with fixing means for sealing foil}
- E04H 4/143 . . {Swimming lane markers with or without wave suppressors}
- E04H 4/144 . . {Means for facilitating access, e.g. step units or slides (invalid-lifting devices for swimming pools [A61G 7/10D](#))}
- E04H 4/145 . . {Dividing means for swimming pools, e.g. panels, bulkheads}
- E04H 4/148 . . { Lighting means}
- E04H 4/16 . . specially adapted for cleaning (cleaning devices peculiar to vessels [B63B 59/00](#))
- E04H 4/1609 . . . {Hand-held strainers, non-powered brushes or scrubbers}
- E04H 4/1618 . . . {Hand-held powered cleaners}
- E04H 4/1627 {Powered gutter cleaners}
- E04H 4/1636 {Suction cleaners}
- E04H 4/1645 { Connections to the pool water circulation system}
- E04H 4/1654 . . . {Self-propelled cleaners}
- E04H 4/1663 {the propulsion resulting from an intermittent interruption of the waterflow through the cleaner}
- E04H 4/1672 { Connections to the pool water circulation system}
- E04H 4/1681 . . . {Cleaning whips}
- E04H 4/169 . . . {Pool nozzles}

E04H 5/00 **Buildings or groups of buildings for industrial or agricultural purposes (building construction in general [E04B 1/00](#))**

- E04H 5/02 . . Buildings or groups of buildings for industrial purposes, e.g. for power-plants, factories (buildings forming part of cooling plants [E04H 5/10](#); building structures for parking vehicles [E04H 6/00](#))
- E04H 5/04 . . Transformer houses; Substations or switchgear houses
- E04H 5/06 . . Pits or building structures for inspection or services (manhole shafts or other inspection chambers in general [E02D 29/12](#))

- E04H 5/08 . . Buildings or groups of buildings for agricultural purposes (silos [E04H 7/22](#); manure storage places [A01C 3/02](#); greenhouses [A01G 9/14](#))

- E04H 5/10 . . Buildings forming part of cooling plants
- E04H 5/12 . . Cooling towers (towers in general [E04H 12/00](#); cooling equipment [F28](#))

- E04H 6/00** **Buildings for parking cars, rolling stock, aircraft, vessels or like vehicles, e.g. garages** (tents for use as garages [E04H 15/00](#); bicycle stands [B62H](#); storing of vessels on land [B63C 15/00](#); construction of ground-supported surfaces [E01C](#); marking of parking areas on the ground [E01F 9/00](#); building construction in general [E04B 1/00](#))
- E04H 6/005 . {Garages for vehicles on two wheels}
- E04H 6/02 . Small garages, e.g. for one or two cars (attached to, or supported by, the vehicle [B62D](#); prefabricated and with undivided interior [E04B 1/343](#))
- E04H 6/025 .. {in the form of an overhead canopy, e.g. carports}
- E04H 6/04 .. wheeled, hinged, foldable, telescopic, swinging or otherwise movable ({[E04H 6/025](#) takes precedence}); transportable or collapsible buildings in general [E04B 1/343](#))
- E04H 6/06 .. with means for shifting or lifting vehicles
- E04H 6/065 ... {using tiltable floors or ramps (in garages for many vehicles [E04H 6/26](#))}
- E04H 6/08 . Garages for many vehicles
- E04H 6/10 .. without mechanical means for shifting or lifting vehicles, e.g. with helically-arranged fixed ramps, with movable ramps {[E04H 6/26](#) takes precedence}
- E04H 6/12 .. with mechanical means for shifting or lifting vehicles
- E04H 6/14 ... with endless conveyer chains having load-carrying parts moving vertically, e.g. paternoster lifts {also similar transport in which cells are continuously mechanically linked together}
- E04H 6/16 ... Garages shaped as a wheel or drum rotatable about a horizontal axis
- E04H 6/18 ... with means for transport in vertical direction only or independently in vertical and horizontal directions ([E04H 6/14](#) takes precedence)
- E04H 6/181 {the cars rolling freely from the transfer means ([E04H 6/282](#) takes precedence)}
- E04H 6/182 {using car-gripping transfer means ([E04H 6/285](#) takes precedence)}
- E04H 6/183 {without transverse movement of the car after leaving the transfer means}
- E04H 6/185 {using comb-type transfer means ([E04H 6/287](#) takes precedence)}
- E04H 6/186 {without transverse movement of the car after leaving the transfer means}
- E04H 6/187 {using vertical parking loops}
- E04H 6/188 {using only vertical transport means}
- E04H 6/20 characterised by the use of conveyer chains or rotatable rollers for horizontal transport
- E04H 6/22 characterised by the use of movable platforms for horizontal transport, {i.e. cars being permanently parked on pallets ([E04H 6/20](#) takes precedence)}
- E04H 6/225 {without transverse movement of the parking palette after leaving the transfer means}
- E04H 6/24 characterised by the use of dollies for horizontal transport, {i.e. cars being permanently parked on wheeled platforms ([E04H 6/20](#) takes precedence)}
- E04H 6/245 {without transverse movement of the wheeled parking platform after leaving the transfer means}
- E04H 6/26 characterised by the use of tiltable floors or floor sections; characterised by the use of movable ramps
- E04H 6/28 characterised by the use of turntables or rotary rings for horizontal transport {[E04H 6/20](#) takes precedence}

- E04H 6/282 {turntables, rotary elevators or the like on which the cars are not permanently parked}
- E04H 6/285 {using car-gripping transfer means}
- E04H 6/287 {using comb-type transfer means}
- E04H 6/30 . . . with means for transport in horizontal direction only
- E04H 6/302 {the cars rolling freely from the transfer means}
- E04H 6/305 {using car-gripping transfer means}
- E04H 6/307 {using comb-type transfer means}
- E04H 6/32 characterised by use of conveyer chains or rotatable rollers
- E04H 6/34 characterised by use of movable platforms {[E04H 6/32](#) takes precedence}
- E04H 6/36 characterised by use of freely-movable dollies
- E04H 6/38 characterised by use of tiltable floors or floor sections
- E04H 6/40 characterised by use of turntables or rotary rings {[E04H 6/32](#) to [E04H 6/38](#) take precedence}

- E04H 6/42 . . . Devices or arrangements peculiar to garages, not covered elsewhere, e.g. securing devices, safety devices, {monitoring and operating schemes; centering devices}
- E04H 6/422 . . . {Automatically operated car-parks}
- E04H 6/424 . . . {Positioning devices}
- E04H 6/426 . . . {Parking guides}
- E04H 6/428 . . . {Devices for collecting oil or other fluids under parked cars (servicing, maintaining, repairing or refitting of vehicles [B60S 5/00](#))}

- E04H 6/44 . . . for storing aircraft (structures covering a large free area [E04B 1/342](#))

- E04H 7/00** **Construction or assembling of bulk storage containers employing civil engineering techniques in situ or off the site** (tower aspects [E04H 12/00](#); storage aspects, e.g. floating roofs, sealing means, filling or discharging means [B65D](#), [B65G](#), [F17B](#), [F17C](#); foundations [E02D 27/38](#))

- E04H 7/02 . . . Containers for fluids or gases; Supports therefor (arrangements or adaptations of tanks for water supply [E03B 11/00](#))
- E04H 7/04 . . . mainly of metal
- E04H 7/06 . . . with vertical axis
- E04H 7/065 {roof constructions}
- E04H 7/14 . . . ball-shaped
- E04H 7/16 . . . with horizontal axis
- E04H 7/18 . . . mainly of concrete, e.g. reinforced concrete, or other stone-like material
- E04H 7/20 . . . Prestressed constructions

- E04H 7/22 . . . Containers for fluent solids, e.g. silos, bunkers; Supports therefor
- E04H 7/24 . . . Constructions, with or without perforated walls, depending on the use of specified materials
- E04H 7/26 . . . mainly of concrete, e.g. reinforced concrete or other stone-like materials
- E04H 7/28 composed of special building elements
- E04H 7/30 . . . mainly of metal

- E04H 7/32 . . . mainly of wood
- E04H 9/00** **Buildings, or groups of buildings, or shelters adapted to withstand or provide protection against abnormal external influences, e.g. war-like action, earthquake, extreme climate** (floatable buildings [B63B](#); foundation aspects [E02D](#); building constructions in general [E04B](#); bearings or like supports allowing movement [E04B 1/36](#); special details in regard to insulation or other protection [E04B 1/62](#); supporting structures for endangered or damaged existing buildings or parts thereof [E04G 23/04](#); doors, windows [E06B 5/00](#); air-conditioning, ventilation [F24E](#); camouflage [F41H 3/00](#); cells or rooms shielded against dangerous radiation [G21F 7/00](#))
- E04H 9/02 . withstanding earthquake or sinking of ground (foundations [E02D 27/34](#); {making use of active or passive dynamic mass damping systems [E04B 1/985](#)})
- E04H 9/021 . . {Bearing, supporting or connecting constructions specially adapted for such buildings}
- E04H 9/022 . . . {and comprising laminated structures of alternating elastomeric and rigid layers}
- E04H 9/023 . . . {and comprising rolling elements, e.g. balls, pins}
- E04H 9/024 . . { Structures with steel columns and beams}
- E04H 9/025 . . { Structures with concrete columns}
- E04H 9/027 . . { Preventive constructional measures against earthquake damage in existing buildings}
- E04H 9/028 . . { Earthquake withstanding shelters}
- E04H 9/029 . . . { arranged inside of buildings ([E04H 9/06](#) takes precedence)}
- E04H 9/04 . against air-raid or other warlike actions (respiratory apparatus [A62B](#))
- E04H 9/06 . . Structures arranged in or forming part of buildings
- E04H 9/08 . . . Structures arranged underneath buildings, e.g. air-raid shelters
- E04H 9/10 . . Independent shelters; Arrangement of independent splinter-proof walls
- E04H 9/12 . . . entirely underneath the level of the ground, e.g. air-raid galleries (tunnels, mine galleries [E21D](#))
- E04H 9/14 . against other dangerous influences, e.g. tornadoes, floods
- E04H 9/145 . . {Floods (protecting building openings [E06B 9/00](#))}
- E04H 9/16 . against adverse conditions, e.g. extreme climate, pests
- E04H 12/00** **Towers; Masts, poles; Chimney-stacks; Water-towers; Methods of erecting such structures** (cooling-towers [E04H 5/12](#); devices for erecting masts or poles [B66F](#); foundation piles [E02D 5/22](#); foundations for masts, poles, chimneys [E02D 27/42](#); structural elongated members in general [E04C 3/00](#); fixed climbing irons [E06C 9/04](#); derricks for oil drilling [E21B 15/00](#))
- E04H 12/003 . . {Access covers or locks therefor}
- E04H 12/02 . Structures made of specified materials ([E04H 12/16](#), [E04H 12/18](#) take precedence)
- E04H 12/04 . . of wood
- E04H 12/06 . . . Truss-like structures
- E04H 12/08 . . of metal

- E04H 12/085 . . . { Details of flanges for tubular masts}
- E04H 12/10 . . . Truss-like structures
- E04H 12/12 . . of concrete or other stone-like material, with or without internal or external reinforcements, e.g. with metal coverings, with permanent form elements
- E04H 12/14 . . . Truss-like structures
- E04H 12/16 . Pre-stressed structures
- E04H 12/18 . movable or with movable sections, e.g. rotatable, telescopic ({ flexible slalom gate poles [A63C 19/062](#); flexible road sign supports [E01F 9/017](#)}; rotary buildings [E04B 1/346](#))
- E04H 12/182 . . {telescopic (locking of telescopic systems in general [F16B 7/10](#))}
- E04H 12/185 . . {with identical elements}
- E04H 12/187 . . {with hinged sections}
- E04H 12/20 . Side supporting means therefor, e.g. using guy ropes, struts (ground anchors [E02D 5/80](#); fastening means for cables or ropes [F16G 11/00](#))
- E04H 12/22 . Sockets or holders for poles or posts {(for sports articles, e.g. floor sockets [A63B 71/023](#); for road signs [E01F 9/011](#); foundations for poles, masts or chimneys [E02D 27/42](#))}
- E04H 12/2207 . . {not used}
- E04H 12/2215 . . . {driven into the ground (ground anchors [E02D 5/80](#))}
- E04H 12/2223 {by screwing}
- E04H 12/223 {with movable anchoring elements; with separately driven anchor rods}
- E04H 12/2238 . . {to be placed on the ground (christmas tree stands [A47G 33/12](#))}
- E04H 12/2246 . . . {filled with water, sand or the like}
- E04H 12/2253 . . {Mounting poles or posts to the holder ([E04H 12/2284](#) takes precedence; break-away mountings [E01F 9/018](#))}
- E04H 12/2261 . . . {on a flat base ([E04H 12/08](#), [E04H 12/10](#) take precedence)}
- E04H 12/2269 . . . {in a socket}
- E04H 12/2276 . . . {Clamping poles or posts on a stub ([E04H 12/2269](#) takes precedence)}
- E04H 12/2284 . . {Means for adjusting the orientation of the post or pole}
- E04H 12/2292 . . {Holders used for protection, repair or reinforcement of the post or pole ([E04H 12/2276](#) takes precedence)}
- E04H 12/24 . Cross arms
- E04H 12/26 . Winding-towers for mines (elevators [B66B](#))
- E04H 12/28 . Chimney stacks, e.g. free-standing, or similar ducts (foundations [E02D 27/42](#); chimneys as part of buildings [E04F 17/02](#); connections between furnace and smoke-stack, chimney equipment [F23](#))
- E04H 12/30 . Water-towers (tanks [B65D 88/00](#); use of high-level tanks [E03B 11/12](#))
- E04H 12/32 . Flagpoles (flags, banners, mountings therefor [G09F 17/00](#))
- E04H 12/34 . Arrangements for erecting or lowering towers, masts, poles, chimney stacks, or the

like

- E04H 12/341 .. { Arrangements for casting in situ concrete towers or the like}
- E04H 12/342 .. { Arrangements for stacking tower sections on top of each other ([E04H 12/344](#) takes precedence)}
- E04H 12/344 .. { Arrangements for lifting tower sections for placing additional sections under them}
- E04H 12/345 .. { Arrangements for tilting up whole structures or sections thereof ([E04H 12/347](#) takes precedence)}
- E04H 12/347 .. { Arrangements for setting poles in the ground}
- E04H 12/348 .. { Arrangements for demolition towers or the like}

E04H 13/00 **Monuments; Tombs; Burial vaults; Columbaria, ({coffins, urns [A61G 17/00](#)}; sculpture or other artistic features [B44](#))**

- E04H 13/001 . {Accessories for grave sites, e.g. liners, covers, vault lowering devices ([E04H 13/003](#) takes precedence)}
- E04H 13/003 . {Funeral monuments, grave sites curbing or markers not making part of vaults ([E04H 13/008](#) takes precedence)}
- E04H 13/005 . {Ventilation systems therefor}
- E04H 13/006 . {Columbaria, mausoleum with frontal access to vaults}
- E04H 13/008 . {Memorials for cremation ashes ([E04H 13/006](#) takes precedence)}

E04H 14/00 **Buildings for combinations of different purposes not covered in a single previous group of this subclass, e.g. for double purpose ([E04H3/02](#), [E04H 9/06](#) take precedence); Buildings of the drive-in type**

E04H 15/00 **Tents or canopies, in general**

- E04H 15/001 . {Hunting, fishing huts or the like}
- E04H 15/003 . {Bathing or beach cabins}
- E04H 15/005 .. { Wind breakers, i.e. fabric stretched between posts anchored in the ground}
- E04H 15/006 . {Tents used as toys}
- E04H 15/008 . {Tents or tent-like constructions composed partially of rigid panels ([E04H 15/06](#) takes precedence; trailer-type vehicles or caravans with foldable or readily disassembled living accommodation comprising flexible elements [B60P 3/341](#))}
- E04H 15/02 . Tents combined or specially associated with other devices
- E04H 15/04 .. suspended type, e.g. from trees, from cantilever supports ([supporting frames \[E04H 15/34\]\(#\)](#))
- E04H 15/06 .. Tents at least partially supported by vehicles
- E04H 15/08 ... Trailer awnings or the like

- E04H 15/10 .. Heating, lighting or ventilating (for heating, lighting or ventilating devices per se, see the relevant classes, e.g. [F21](#), [F24](#))
- E04H 15/12 ... Heating
- E04H 15/14 ... Ventilating
- E04H 15/16 of tent roofs

- E04H 15/18 . Tents having plural sectional covers, e.g. pavilions, vaulted tents, marquees, circus tents ([inflatable E04H 15/20](#)); Plural tents, e.g. modular

- E04H 15/20 . inflatable, e.g. shaped, strengthened, or supported by fluid pressure ([connection of valves to inflatable elastic bodies B60C 29/00](#); inflatable forms for making walls or the like [E04G 11/04](#))
- E04H 15/22 .. supported by air pressure inside the tent

- E04H 15/24 . cone shaped, e.g. teepees

- E04H 15/26 . Centre-pole supported tents ([umbrella-type E04H 15/28](#))

- E04H 15/28 . Umbrella type tents

- E04H 15/30 . convertible, e.g. from one type to another type tent, from tent to canopy, from tent cover into diverse articles ([sacks or packs convertible into tents A45F 4/04](#); [coats or capes convertible into tent coverings A45F 4/14](#))

- E04H 15/32 . Parts, components, construction details, accessories, interior equipment, specially adapted for tents, e.g. guy-line equipment, skirts, thresholds
- E04H 15/322 .. {Stretching devices}
- E04H 15/324 .. {Beds constituted by the tent supporting means (Beds per se, [A47C](#))}
- E04H 15/34 .. Supporting means, e.g. frames
- E04H 15/36 ... arch-shaped type ([E04H 15/42](#) takes precedence; { arches connected with lazy-tongues [E04H 15/505](#)})
- E04H 15/38 expansible, e.g. extensible {in a fan type manner}
- E04H 15/40 flexible
- E04H 15/405 { flexible and foldable}
- E04H 15/42 ... external type, e.g. frame outside cover
- E04H 15/425 {Flexible supporting means}
- E04H 15/44 ... collapsible, e.g. breakdown type {having connecting nodes}([E04H 15/42](#) takes precedence; building structures having collapsible parts in general [E04B 1/343](#))
- E04H 15/46 telescoping and foldable
- E04H 15/48 foldable, i.e. having pivoted or hinged means ({[E04H 15/405](#) and}[E04H 15/46](#) takes precedence)
- E04H 15/50 lazy-tong type
- E04H 15/505 { characterised by connecting arches with lazy-tongues}
- E04H 15/52 parallelogram type
- E04H 15/54 .. Covers of tents or canopies ([ventilated tent roofs E04H 15/16](#))
- E04H 15/56 .. Floors
- E04H 15/58 .. Closures; Awnings; Sunshades

- E04H 15/60 .. Poles
- E04H 15/62 .. Pegs, stakes or the like
- E04H 15/64 .. Tent or canopy cover fastenings
- E04H 15/642 ... { with covers held by elongated fixing members locking in longitudinal recesses of a frame}
- E04H 15/644 { the fixing members being a beading}
- E04H 15/646 { the fixing members being locked by an additional locking member}
- E04H 15/648 { the longitudinal recesses being made from two clamping members}

E04H 17/00

Fencing, e.g. fences, enclosures, corrals (features peculiar to electrified fences [A01K 3/00](#), [H05C](#); means for allowing passage through fences, barriers, or the like [E06B 11/00](#))

- E04H 17/003 . { Anti-climbing devices, e.g. fixed or rotary spikes}
- E04H 17/02 . Wire fencing ([E04H 17/14](#) takes precedence)
- E04H 17/04 .. using wire, barbed wire, wire mesh, toothed strips, or the like; Coupling means therefor ([wire netting B21F 27/00](#); other metallic fabrics see the relevant classes; {tumbuckles [F16G 11/12](#)})
- E04H 17/06 .. Parts for wire fences
- E04H 17/063 ... {Fence liners; Vegetation prevention barriers}
- E04H 17/066 ... {Slots for chain link fences}
- E04H 17/08 ... Anchoring means therefor, e.g. specially-shaped parts entering the ground; Struts or the like (for towers or masts [E04H 12/20](#); sockets for posts [E04H 12/22](#))

NOTE

Parts entering the ground are classified in [E04H 12/22](#)

- E04H 17/10 .. characterised by the way of connecting wire to posts; Droppers
- E04H 17/12 ... the wire being placed in slots, grooves, or the like
- E04H 17/14 . Fences constructed of rigid elements, e.g. with posts, with additional wire fillings
- E04H 17/1404 .. {using building blocks}
- E04H 17/1408 .. {using woven slats}
- E04H 17/1413 .. {Post-and-rail fences without vertical cross-members}
- E04H 17/1417 .. {Post-and-rail fences with vertical cross-members}
- E04H 17/1421 ... {Connections between rail and post}
- E04H 17/1426 .. {Picket fences}
- E04H 17/143 ... {with separate pickets attached to the side of the horizontal members}
- E04H 17/1434 {Connections between horizontal members and post}
- E04H 17/1439 ... {with separate pickets going through the horizontal members}
- E04H 17/1443 {Connections between horizontal members and post}
- E04H 17/16 .. using prefabricated panel-like elements, e.g. wired frames
- E04H 17/161 ... {using wired panels without frame}

- E04H 17/163 . . . {using wired panels with frame}
 - E04H 17/165 . . . {using panels with frame ([E04H 17/163](#) takes precedence)}
 - E04H 17/166 {with cross-members}
 - E04H 17/168 . . . {using panels without frames and fitted in grooves of posts}
 - E04H 17/18 . . . Corrals, i.e. easily transportable or demountable enclosures
 - E04H 17/20 . . Posts therefor
 - E04H 17/22 . . . Anchoring means therefor, e.g. specially-shaped parts entering the ground; Struts or the like (for towers or masts [E04H 12/20](#); sockets for posts [E04H 12/22](#))
- NOTE**
- Parts entering the ground are classified in [E04H 12/22](#)
- E04H 17/24 . . Connections for attaching additional wire to frames, posts or railings
 - E04H 17/26 . Devices for erecting or removing fences {(hand-operated hammers having the impact head in form of a sleeve slidable on a shaft [B25D 1/16](#))}
 - E04H 17/261 . . {for post and wire handling}
 - E04H 17/263 . . . {for erecting posts (pile driving [E02D 7/00](#))}
 - E04H 17/265 . . . {for removing posts}
 - E04H 17/266 . . . {for stretching or winding wire or wire mesh}
 - E04H 17/268 . . {Hand tools for wiring fences, e.g. tying or splicing tools ([E04H 17/266](#) takes precedence)}
- E04H 2001/00 Buildings or groups of buildings for dwelling or office purposes; General lay-out, e.g. modular co-ordination, staggered storeys {small buildings}([E04H 3/00](#) takes precedence; buildings for two or more purposes, e.g. drive-in buildings 14/00; building construction in general [E04B 1/00](#))**
- E04H 2001/12 . Small buildings or other erections for limited occupation, erected in the open air or arranged in buildings, e.g. kiosks, waiting shelters for bus stops or for filling stations, roofs for railway platforms, watchmens' huts, dressing cubicles (movable screens as household equipment [A47G 5/00](#))
 - E04H 2001/1283 . . Small buildings of the ISO containers type
 - E04H 2001/1288 . . Sauna cabins
 - E04H 2001/1294 . . Booths for smoking
- E04H 2003/00 Buildings or groups of buildings for public or similar purposes; Institutions, e.g. infirmaries, prisons (portions of buildings for individual occupation, e.g. cubicles [E04H 1/00](#); structures covering a large free area [E04B 1/342](#))**
- E04H 2003/10 . for meetings, entertainments, or sports
 - E04H 2003/14 . . Gymnasiums; Other sporting buildings (tribunes [E04H 3/12](#))
 - E04H 2003/142 . . . with vertically movable or tiltable playing field or sections
 - E04H 2003/145 . . . with reconfigurable seating arrangement

- E04H 2003/147 using horizontally movable sections of tribunes
- E04H 2004/00** **Swimming or splash baths or pools** ([wave-producers for baths A47K 3/10](#); [separation B01D](#); [treatment of water C02F](#); [wave-producing pumps F04D 35/00](#))
- E04H 2004/0018 . { **Easily movable or transportable swimming pools**}
- E04H 2004/0068 . . made of plastic shells or plastic elements including at least parts of walls and floors
- E04H 2004/14 . Parts, details or accessories not otherwise provided for
- E04H 2004/146 . . Fixing of liners
- E04H 2004/147 . . . the liner edge being held in a slot
- E04H 2005/00** **Buildings or groups of buildings for industrial or agricultural purposes** ([building construction in general E04B 1/00](#))
- E04H 2005/005 . Buildings for data processing centers
- E04H 2007/00** **Construction or assembling of bulk storage containers employing civil engineering techniques in situ or off the site** ([tower aspects E04H 12/00](#); [storage aspects, e.g. floating roofs, sealing means, filling or discharging means B65D, B65G, F17B, F17C](#); [foundations E02D 27/38](#))
- E04H 2007/22 . Containers for fluent solids, e.g. silos, bunkers; Supports therefor
- E04H 2007/225 . . Silos with retaining wall type wall elements, e.g. trench silos
- E04H 2009/00** **Buildings, or groups of buildings, or shelters adapted to withstand or provide protection against abnormal external influences, e.g. war-like action, earthquake, extreme climate** ([floatable buildings B63B](#); [foundation aspects E02D](#); [building constructions in general E04B](#); [bearings or like supports allowing movement E04B 1/36](#); [special details in regard to insulation or other protection E04B 1/62](#); [supporting structures for endangered or damaged existing buildings or parts thereof E04G 23/04](#); [doors, windows E06B 5/00](#); [air-conditioning, ventilation F24E](#); [camouflage F41H 3/00](#); [cells or rooms shielded against dangerous radiation G21F 7/00](#))
- E04H 2009/02 . withstanding earthquake or sinking of ground ([foundations E02D 27/34](#); {[making use of active or passive dynamic mass damping systems E04B 1/985](#)})
- E04H 2009/026 . . Anti-seismic devices with hydraulic or pneumatic damping
- E04H 2012/00** **Towers; Masts, poles; Chimney-stacks; Water-towers; Methods of erecting such structures** ([cooling-towers E04H 5/12](#); [devices for erecting masts or poles B66F](#); [foundation piles E02D 5/22](#); [foundations for masts, poles, chimneys E02D 27/42](#); [structural elongated members in general E04C 3/00](#); [fixed climbing irons E06C 9/04](#); [derricks for oil drilling E21B 15/00](#))
- E04H 2012/006 . Structures with truss-like sections combined with tubular-like sections
- E04H 2015/00** **Tents or canopies, in general**

- E04H 2015/20 . inflatable, e.g. shaped, strengthened, or supported by fluid pressure ([connection of valves to inflatable elastic bodies B60C 29/00](#); inflatable forms for making walls or the like [E04G 11/04](#))
- E04H 2015/201 .. with inflatable tubular framework, with or without tent cover
- E04H 2015/202 .. with inflatable panels, without inflatable tubular framework
- E04H 2015/203 ... supported by a non-inflatable structure or framework
- E04H 2015/204 ... made from contiguous inflatable tubes
- E04H 2015/205 ... made from two sheets with intermediate spacer means
- E04H 2015/206 .. Details of inflation devices, e.g. valves, connections to fluid pressure source
- E04H 2015/207 .. Tents specially designed for insulation
- E04H 2015/208 .. with inflatable mattresses
- E04H 2015/209 .. Structures with a netting or similar for anchorage

- E04H 2015/32 . Parts, components, construction details, accessories, interior equipment, specially adapted for tents, e.g. guy-line equipment, skirts, thresholds
- E04H 2015/326 .. Frame members connected by elastic cord
- E04H 2015/328 .. Frames kept erected solely by guy lines

- E04H 2017/00 **Fencing, e.g. fences, enclosures, corrals** ([features peculiar to electrified fences A01K 3/00, H05C](#); means for allowing passage through fences, barriers, or the like [E06B 11/00](#))

- E04H 2017/006 . Caps for posts

- E04H 2017/14 . Fences constructed of rigid elements, e.g. with posts, with additional wire fillings
- E04H 2017/1447 .. Details of connections between rails and posts
- E04H 2017/1452 ... the ends of the rails are fixed on the lateral sides of the posts
- E04H 2017/1456 the ends of the rails being located in vertical channels extending along a substantial portion of the length of the post
- E04H 2017/146 ... the rails being attached to the front faces of the posts
- E04H 2017/1465 ... the rails being supported within blind or through holes of the posts
- E04H 2017/1469 Snap connections
- E04H 2017/1473 ... using fixing devices encircling, partially or fully, the post
- E04H 2017/1478 ... the posts extending through apertures or cut-outs in the rails
- E04H 2017/1482 ... the rails being attached to the tops of the posts
- E04H 2017/1486 ... the rails being positioned between the uprights of double posts
- E04H 2017/1491 ... Hinged connections between rails and posts
- E04H 2017/1495 .. Fences with pivotable slats for reduced wind resistance or for adjusting visibility